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MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

Run on: Sat May 13 11:04:12 2000; MasPar time 3.92 Seconds 254.055 Million cell updates/sec

Tabular output not generated.

Description:
Perfect Score:
Sequence: >US-09-331-631-8 (120-161) from US09331631.pep (4 of 4) 344 1 SQRQFQECQQHCHQQEQRPEKKQQCVRECREKYQENPWRGER 42

Scoring table: PAM 150 Gap 11

Searched: 188963 seqs, 23686106 residues

Post-processing: Minimum Match 0% Listing first 45 summaries

Database: a-geneseq35 1:geneseqp

Statistics: Mean 23.518; Variance 86.543; scale 0.272

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

23	221	20	19	18	17	16	15	14	13	12	11	10	9	8	7	σ	U	4	ω	2	⊢ -	Result
75	76	78	79	79	81	81	84	88	88	89	93	94	94	96	104	120	127	128	168	168	344	Score
21.8	22.1	22.7	23.0							•	٠	27.3		27.9		•			٠	٠	100.0	Query Match
303	354	1206	277	276	489	409	395	593	33	1211	35	524	444	28	637	625	666	666	566	525	590	Length
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Y07101	W73310	W47030	P91636	P91657	W90341	W90342	W03474	W62835	W62836	W47028	R21079	W90339	W90340	W62841	W62837	W62830	W62829	W62828	R20181	W62831	W62832	ID
Spinocerebeilar ataxia Colon cancer associate	Cellulose synthase Pcs	Bovine N-proteinase.		Long overlaping open r	G. max SBP2 protein.	G. max truncated SBP2	Mouse SRY-related prot	Zea mays antimicrobial	Ď.	Human N-proteinase (13		G. max SBP1 protein.	G. max truncated SBP1	Stenocarpus sinuatus a	Hordeum vulgare antimi	Macadamia integrifolia	Macadamia integrifolia	a integrifo	Sequence encoded by 67	Theobroma cacao antimi	Gossypium hirsutum ant	Description
1.39e+U1 1.71e+01	1.39e+01	9.23e+00	7.51e+00	7.51e+00	4.95e+00	4.95e+00	2.64e+00	1.13e+00		9.13e-01		•				9.40e-04			1.19e-08	1.19e-08	8.96e-28	Pred. No.

7

45	44	43	42	41	40	39	3 8	37	36	3 5	34	3 3	32	31	30	29	28	27	26	25	24
72	72	72	72	72	72	72	72	73	73	74	74	74	74	74	74	74	74	74	75	75	75
20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	21.2	21.2	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.8	21.8	21.8
3144	438	140	94	86	86	63	55	3163	850	1000	806	800	787	781	737	737	737	371	1291	1290	369
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W09871	W59836	P91891	W95080	W95073	W95078	W95079	W95077	R94347	W94901	W64674	W64675	W64703	W64694	W64695	R76639	W18317	R76640	W73369	Y01687	Y06809	W62647
Human huntingtin.	Maize Id protein.	Part of the sequence o	GST-HD fusion protein	GST-HD fusion protein	fusion	GST-HD fusion protein	GST-HD fusion protein	Hepatitis GB virus (HG	Mouse pheromone recept	Human ADNF-III protein	Mouse ADNF-III protein			Mouse ADNF-III protein	Deltex protein produce	Drosophila Deltex prot	Deltex protein.	Epitope tagged TBP pro	Protein encoded by the		Mature durum wheat glu
3.14e+01	3.14e+01	3.14e+01	3.14e+01	3.14e+01	3.14e+01	3.14e+01	3.14e+01	2.57e+01	2.57e+01	2.09e+01	2.09e+01	2.09e+01	2.09e+01	2.09e+01	2.09e+01	2.09e+01	2.09e+01	2.09e+01	1.71e+01	1.71e+01	1.71e+01

ALIGNMENTS

RESULT ID W62831 standard; Protein; 525 AA. AC W62831, DT 27-OCT-1998 (first entry) DE Theobroma cacao antimicrobial protein. KW antimicrobial protein; infestation; control. KW antimicrobial protein; infestation; control. W09827805-AL. PN W09827805-AL. PD 02-JUL-1998. PF 22-DEC-1997; AU0874. PR 20-DEC-1997; AU0874. PR 20-DEC-1996; AU-004275. PA (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY. PA (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY. PI Bower NJ, Goulter KC, Green JL, Manners JM, Marcus JP; PT Novel anti-microbial protein from e.g. Macadamia integrifolia - PT Novel anti-microbial protein from e.g. Macadamia integrifolia - PT useful for controlling microbial infestations of plants or mammals	Query Match 100.0%; Score 344; DB 1; Length 590; Best Local Similarity 100.0%; Pred. No. 8.96e-28; Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps Db 120 SQRQFQECQOHCHQQEQRPEKKQQCVRECREKYQENPWRGER 161	ID W62832 standard; Protein; 590 AA. AC W62832; DT 27-OCT-1998 (first entry) DE Gossyplum hirsutum antimicrobial protein. KW antimicrobial protein; infestation; control. OS Gossyplum hirsutum. PN W09827805-A1. PN W09827805-A1. PP 22-DEC-1997; AU0874. PR 20-DEC-1996; AU-004275. PR 20-DEC-1997; AU-004275. PR 20-DEC-1997; AU-004275. PR W1; 98-377279/32. PT Novel anti-microbial protein from e.g. Macadamia integrifolia - PT Novel anti-microbial protein from e.g. Macadamia integrifolia - PT Useful for controlling microbial infestations of plants or mammals PS Claim 1; Page 49-51; 96pp; English. CC The sequence is that of an antimicrobial protein which can CC animals. SQ Sequence 590 AA;
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26-DEC-1991; G00914.
07-JUN-1991; G00914.
11-JUN-1990; GB-013016.
(MRSC ) MARS UK LTD.
Spencer ME, Hodge R, Deakin E&
WPI; 92-024418/03.
                  02-JUL-1998.
22-DEC-1997; AU0874.
20-DEC-1996; AU-004275.
20-DEC-1996; AU-004275.
(RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
BOWER NI, Goulter KC, Green JL, Manners JM, Mar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               W62828 standard; Protein; W62828; 27-OCT-1998 (first_entry)
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The inventors claim a 67 kD and 31 kD T. cacao protein, and fragments, and encoding DNAs. The 47 kD and 31 kD proteins are derived from the 67 kD precursor. T. cacao protein cDNA was detected in a cDNA library prepared from immature cocoa beans RNA using a probe based on the AA sequence of a CNBr peptide common to the 47 kD and 31 kD polypeptides. Homology searches revealed close homologies between the 67 kD polypeptide and the vicilins, which are
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The sequence is that of an antimicrobial protein which can be used to control microbial infestations in plants and mammalian animals.

Sequence 525 AA;
   N-PSDB;
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ence 566 AA;
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02-JUL-1998.
22-DEC-1997; AU0874.
22-DEC-1996; AU-004275.
(RETR-) COOP RES CENT TR
Bower NI, Goulter KC, Gr
WPI; 98-377279/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel anti-microbial protein from e.g. Macadamia integruseful for controlling microbial infestations of plants Claim 1; Page 34-36; 96pp; English.
The sequence is that of an antimicrobial protein which be used to control microbial infestations in plants and animals.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LT 6
W62830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel anti-microbial protein from e.g. Mac useful for controlling microbial infestations and it is age 39-41; 96pp; English.
The sequence is that of an antimicrobial personal personal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LT 5
W62829
                                                                                                                                                                                                                                                                                                                         Protein
                                                                                                                                                                                                                                                                                                                                                                                                Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           antimicrobial protein; infestation; Macadamia integrifolia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Macadamia integrifolia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     W62830;
27-OCT-1998 (first_entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          animals
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               W62829;
27-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         N-PSDB; V42311.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Macadamia integrifolia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120 SQRQFQECQQHCHQQEQRPEKKQQCVRECREKYQENPWRGER 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              122 PQQQYEQCQERCQRHETEPRHMQTCQQRCERRYEKEKRKQQK 163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120 SQRQFQECQQHCHQQEQRPEKKQQCVRECREKYQENPWRGER 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                122 POOQYEQCOKHCORRETEPRHMOTCOORCERRYEKEKRKOOK 163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98-377279/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                standard; Protein; 625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          standard;
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11; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
12; Conser
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A,
                                                                                                                                                                                                                                                                           /note= "signal,
29. .666
/note= "mature]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note= "signal peptide"
29. .666
                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   36.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         37.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               entry)
                                     Green JL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antimicrobial protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "mature protein"
                                                                                                                                                                                                                                                                           "mature protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        antimicrobial protein which al infestations in plants and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 128; DB 1;
Pred. No. 1.50e-04;
17; Mismatches 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 127;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A
                                                                                                                                                                                                                                                                                                                                                          peptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PLANT PATHOLOGY
Manners JM, Mai
                                     Manners JM, Ma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                control.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             control.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1;
.89e-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Marcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            plants and mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12;
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plants or man
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Best Local S
Matches 1
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                        Novel anti-microbial protein from e.g. Macadamia integruseful for controlling microbial infestations of plants Claim 1; Page 66; 96pp; English.

The sequence is that of an antimicrobial protein which be used to control microbial infestations in plants and
                                                                                                                  02-JUL-1998.
22-DEC-1997; AU0874.
20-DEC-1996; AU-004275.
20-DEC-1996; AU-004275.
(RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
Bower NI, Goulter KC, Green JL, Manners JM, Mar
WPI; 98-377279/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                useful for controlling microbial infestations of plants Claim 1; Page 60-62; 96pp; English.
The sequence is that of an antimicrobial protein which be used to control microbial infestations in plants and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     02-JUL-1998.
22-DEC-1997; AU0874.
20-DEC-1996; AU-004275.
20-DEC-1996; AU-004275.
(RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.

BOWER NI, 98-377279/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    useful for controlling microbial infestations of plants or Claim 1; Page 43-45; 96pp; English.

The sequence is that of an antimicrobial protein which can
                                                                                                                                                                                                                Stenocarpus sinuatus antimicrobial protein. antimicrobial protein; infestation; control
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-OCT-1998 (first entry)
Hordeum vulgare antimicrobial protein.
antimicrobial protein; infestation; control.
                                    Sequence
                                                                                                                                                                                         WO9827805-A1.
                                                                                                                                                                                                   Stenocarpus sinuatus.
                                                                                                                                                                                                                                                                W62841
                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hordeum vulgare.
WO9827805-Al.
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                                                animals
                                                                                                                                                                                                                                       27-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                        animais
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel anti-microbial protein from e.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      W62837 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           be used to control microbial infestations in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      N-PSDB; V42316
                                                                                                                                                                                                                                                                                                              124
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                                                                                                                                                                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QRQFQECQQHCHQQEQRPEKKQQCVRECREKYQENPWRGE 160
                                                                                                                                                                                                                                                                             œ
                                                                                                                                                                                                                                                                                                              FQECQQHCHQQEQRPEKKQQCVRECREKYQENPWRGE 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        anti-microbial protein from e.g. Macadamia integrifolia
                                                                                                                                                                                                                                                              standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
15; Conser
                                                                                                                                                                                                                                                                                                                                                                                                            637
                                    28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    625
                                                                                                                                                                                                                                                                                                                                                           30.2%;
llarity 32.4%;
Conservative
                                                                                                                                                                                                                                      (first entry)
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                                    AA;
                                                                                                                                                                                                                                                                                                                                                                                                            AA;
                                                                                                                                                                                                                                                              Protein;
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 27.9%;
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 Score 96;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                      Score 104; DB 1;
Pred. No. 3.46e-02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 120; DB 1;
Pred. No. 9.40e-04;
                                                                                                                                                                                                                                                               A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Manners JM, Marcus JP;
                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  m e.g. Macadamia integrifolia -
infestations of plants or mammals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
 DB 1; L
2.01e-01;
                                                                                                                               Marcus JP;
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Claim 7: Page 36-37; Sbp; English.

This sequence represents a novel sucrose binding protein, SBP1 isolated from Glycine max. This protein is used in a method resulting in the production of a modified plant sucrose binding protein (SBP) which has a modified amino acid sequence compared to a corresponding wild-type SBP, and where expression of the modified SBP in a yeast assay system confers enhanced sucrose uptake compared to the corresponding wild-type SBP.

The products of the invention can be used for producing transgenic plants which have modified sucrose uptake activity, particularly in developing seeds. Enhanced sucrose uptake activity in developing seeds may be desirable where it is an advantage to increase the carbohydrate content of the seed (e.g. where the seed is the primary plant material harvested, such as soybean). In contrast, decreased sucrose uptake activity in seeds might be desirable where the vegetative material of the plant is harvested. The SBP regulatory regions confer specific or enhanced expression in developing seeds and so may be used to express any
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
Matches 1
                                                                                                                                                     26-NOV-1998;
21-MAY-1998;
22-MAY-1997;
            wpI; 99-070155/06.

New modified plant sucrose binding proteins - transgenic plants which can have enhanced or uptake activity in developing seeds placke activity in figure plants.

Disclosure; Page 34-36; 58pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 99-070155/06.

New modified plant sucrose binding proteins - used to develop transgenic plants which can have enhanced or decreased sucrose uptake activity in developing seeds

English.
                                                                                                                                                                                                                                                                       G. max SBP1 protein.
SBP1; sucrose binding protein; SBP2; sucrose uptake; transgenic plant;
                                                                                               Chao WS, Grimes HI WPI; 99-070155/06.
                                                                                                                                                                                                                Glycine max. WO9853086-Al.
                                                                                                                                                                                                                                                      seed; carbohydrate
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W90339;
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SBP1; sucrose binding protein; SBP2; sucrose uptake; seed; carbohydrate content; soybean.
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21-MAY-1998; U10465
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| ::|:||:| | |: | ::|:
127 CQQHCHQQEQRPE-KKQQCVRECREKYQ 153
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Local Similarity 35.7%;
nes 10; Conservative
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novel sucrose binding protein, SBP1
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RESULT NA AC WAR AC WAR
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Matches 1
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E Antimicrobial maize peptide,
Maize; CMIII; corn; pathogen.
S Zea mays.
1 EP-465009-A.
105-JUN-1992.
05-JUN-1991; 305064.
05-JUN-1991; 305064.
05-JUN-1990; US-536127.
(PION-) PIONEER HI-BRED INT.
Duvick JP, Rood TA, Rao AG;
WPI; 92-010214/02.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 10; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Use of maize seed peptide CMIII and DNA encoding it for killing or inhibiting plant pathogenic microorganisms.

Example 2; Page 5; 21pp; English.
The peptide (SEQ ID NO 1) was purified from public corn variety B73 and propriety corn variety MH18. It is basic and has has a total mol. wt. of 3900 daltons. The peptide sequence was used to design probes which were used to screen a maize genomic or cDNA library. The isolated CMIII gene can be used to prepare an expression vector for prodn. of recombinant CMIII for use in controlling plant pathosee also Q20272 and 3.
                                                                                                                                                                Human N-proteinase (130 kDa long form).
N-proteinase; human; collagen; antibody; rheumatoid arthritis; fibrosis; Ehlers-Danlos disease; diagnosis; therapy.
                                                                                                                                                                                                                                                                                         W47028 standard: Protein: 1211
W47028;
06-JUL-1998 (first entry)
    08-JAN-1998.
03-JUL-1997; U12427
                                                                                    W09800555-A1.
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09-APR-1992
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also Q20272 and 3.
ence 35 AA;
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larity 37.0%;
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Pred. No. 3.86e-01;
10; Mismatches 6
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No. 3.11e-01
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Prand rheumatoid arthritis
Place of the sequence encoding human form of human six polypeptide comprises the 130 kDa long form of human N-proteinase, the enzyme responsible for cleaving N-propertide from procollagen to produce mature collagen. The amino acid sequence was deduced from a cDNA sequence (see V06592) derived from human skin fibroblast cDNA clones. The 70 kDa short form (see W47029) of human n-proteinases was also identified. Human N-proteinases can be produced using a claimed method in which a host cell is transformed or transfected with an N-proteinase polynucleotide sequence, cultured in an appropriate culture medium, and the N-proteinase is isolated from the medium. The N-proteinase can be production of antibodies which may be used for the production of mature collagen in vitro and for the production of antibodies which may be used for diagnosis and the therapy of diseases including fibrosis and rheumatoid arthritis. The N-proteinase may also be administered to treat a disease fibles of disease.
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                                                                                                                                                                                                                                                                                                                                                                                                         02-JUL-1998.
02-DEC-1997; AU0874.75
20-DEC-1996; AU-004275.
(RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
(RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
BOWET NI, GOULTER KC, Green JL, Manners JM, Max
WPI: 98-377279/32
                                                                                                                                                                                                                                                                                useful for controlling microbial infestations of pla Disclosure; Page 60; 96pp; English.
The sequence is that of an antimicrobial protein whi be used to control microbial infestations in plants
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Zea mays antimicrobial protein.
antimicrobial protein; infestation; control.
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W62836
                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                 animals
126
                                                                                                                                                                                                                                                                                                                                                                                                      Novel anti-microbial protein from e.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO9827805-A1.
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03-JUL-1996; US-021203.
(COLI/) COLIGE A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ehlers-Danlos disease.
Sequence 1211 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            130 HCHQQEQRPEKKQQCVRE-CREKYQENPW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             958 HCN--DARPESRRACSRELCPGRWRAGPW 984
                                                                                                               Local Similarity nes 10; Conser
                                                         σ
ECQQHC-HQQEQRPEKKQQCVRECREK 151
                           ECRRQCLRRHEGQPWETQECMRRCRRR 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         standard; Protein;
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11; Conser
                                                                                                                                                                                                                                  ^{3}_{3}
                                                                                                            25.6%;
Llarity 37.0%;
Conservative
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37.9%;
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                                                                                                                                                                                                                                                                                                                                                                       rotein from e.g. Macadamia integrifolia -
microbial infestations of plants or mammu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ယ
                                                                                                                                     Score 88;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 89; DB 1;
Pred. No. 9.13e-01
6; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A
                                                                                                            1. No. 1.13e+
Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Manners JM, Marcus JP;
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                                                                                                                                                                   DB 1;
                                                                                                                                              3e+00;
                                                                                                                                                                   Length 33;
                                                                                                               6,
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                                                                                                                                                                                                                                                                                         mammalian
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RESULT 14 ID W62835 standard; AC W62835;

Protein; 593

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                                                                                                                                                                                           Query Match
Best Local S
Matches 1
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Best Local Similarity 37.0%;
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                               Bovine and mouse Sry-related DNA - useful for detecting e.g. the sex of unborn animals (labor animals) and in the page 10-14; 21pp; Japanese.

This is the amino acid sequence of a mouse SRY-related protein. The gene was isolated from a mouse genomic library using a cDNA fragment amplified by primers T33009-10 as a probe. The screen isolated 4 EcoRI fragments of 2.3, 2.8, 3.5 and 1.5 kb covering the gene. Sequence analysis revealed a 240 bp HMG box sequence between bases 7154-7393. Similarity with the human SRY HMG box sequence resulted in primers being generated to amplify the human SRY HMG box sequence for use as a probe to isolate the bovine SRY-related gene (T33008). The mouse and bovine genes are useful for determining the sex of an animal prior to birth.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel anti-microbial protein from e.g. Macadamia integrifolia - useful for controlling microbial infestations of plants or mammals Claim 1; Page 58-60; 96pp; English.

The sequence is that of an antimicrobial protein which can be used to control microbial infestations in plants and mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Zea mays.

WO9827805-Al.

WO9827805-Al.

102-JUL-1998.

22-DEC 1997: AU0874.

20-DEC-1996: AU-004275.

10-DEC-1996: AU-00
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30-NOV-1994; JP-319525.
30-NOV-1994; JP-319525.
(KACH-) KACHIKU JUSEIRAN ISHOKU GIKUTSU KENKYUKU.
WPI; 96-336575/34.
WPSDB; T33007.
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Mouse SRY: related protein.
Mouse; SRY; primer; PCR; po
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W03474 standard; Protein; 395
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Zea mays antimicrobial protein.
antimicrobial protein; infestation; control.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
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J08154685-A.
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||:::| ::| :| | |:|:| || :
126 ECQQHC-HQQEQRPEKKQQCVRECREK 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-OCT-1998
se; SRY; primer; PCR; polymerase chain reaction; amplification; probe; box; human; bovine; sex; animal; birth.
                                                                                                                                                                                       h 24.4%;
Similarity 47.8%;
11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       593 AA;
                                                                                                                                                                                  Score 84; DB 1; Length 395; Pred. No. 2.64e+00; 7; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 88; DB 1; Let
Pred. No. 1.13e+00;
10; Mismatches 6;
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